

## CAD PROCEDURES FOR AMENDMENTS

1. Amendment drawing changes shall be indicated by a triangle or delta .25 inch high on English sheet drawings or 7 mm high for the metric sheet drawings at the location where each amendment change to the drawing occurs.
2. Provide a cloud around the area at each change. Do not obscure drawing details with the cloud. The delta shall be placed inside the cloud.
3. Each delta on the drawing sheet shall be referenced outside the border of the drawing between the border and the edge line. The reference deltas shall be placed in 2 locations in the border, at the side and top or side and bottom. Reference deltas shall be placed in the closest border from the delta on the drawing sheet.
4. An alpha character (lowercase) inside the delta shall be utilized to indicate the amendment number, use “a” for amendment number 0001, “b” for amendment number 0002, “c” for amendment number 0003, etc. The deltas will not be numbered in the body of the drawing, only the total number of deltas will appear in the title block as described below.
5. For noting amendment changes in the title block there are spaces for the Symbol, Description, Action, and Date.
  - a. In the Symbol area place the delta and corresponding alpha character for each amendment. At the upper right of the delta, indicate the total number of deltas that appear on the drawing sheet inside the border for each amendment. The number of deltas should only appear in the title block, no numbers should appear next to the deltas on the drawing sheet or the reference deltas in the border.
  - b. Briefly describe the change or changes that occur for each amendment on the drawing in the Description field. Descriptions shall not be more than one line but describe the actual changes on the drawing sheet (examples: “Changed General note 3”, Revised Detail 4/10, Inserted new Detail 5/10, etc.).
  - c. Identify the amendment number in the Action field by putting “AM” and the amendment number (example: AM 0001, AM 0002, AM 0003, etc).
  - d. In the Date field put the month and the year that the amendment is to be issued (Oct 98, Nov 98, Dec 98, etc.).
  - e. Successive revisions shall be shown progressing upward in the revision block.
6. Designers should contact the Project Manager to obtain the amendment number before making amendment changes. Amendments addressing non-technical specification sections, etc. are sometimes issued which the designer may not be aware of.
7. When there is more than one amendment on a drawing, all previous deltas shall remain; the most current amendment will be clouded. Remove all clouds from previous amendments on the sheet.
8. Line thickness and font: Line thickness for deltas and text shall be .35 mm or .014 inches. Use Microstation “font 1” or Autocad “Romans” fonts. Line thickness for clouds shall be 1.0 mm or .039 inches wide.

9. A Microstation cell library that has deltas and cloud symbols and line style library that has a cloud line is available from the Ft. Worth District. An Autocad block file that has deltas and cloud symbols is available also (ammod.cel, cloud.rsc).
10. At the discretion of the Government, it may be desirable to make drawing changes by write-in descriptive amendment or utilizing 8.5" X 11" sketches. However, this process is utilized only when necessary due to time constraints which is less of a factor because of the paperless advertising process. The A-E shall not make the determination on use of a write-in change. Drawing amendments that are done by narrative/write-in or sketch during the solicitation period shall be incorporated by the A-E into the drawings for the contract award set to include hardcopy drawings, CADD files, and .cal files.
11. All changes made to the drawings shall incorporate the actual size or proportion of the objects on the drawings. Changes to the dimensions with no change to the changed object are not acceptable, except where details are not to scale. Designers shall coordinate changes on all drawings that are effected by the amendment.
12. An added drawing shall be indicated as "NEW DRAWING" in the description block of the title block. The added drawing shall be shown on the index sheet by inserting the sequence, file name, drawing, number, and title in the proper location and surrounding the entire identification with a cloud. In order to avoid renumbering other drawings, an added drawing shall be numbered as "SEQUENCE 2A", "SEQUENCE 2B" or drawing "a-1a", "c-2b", etc.
13. A deleted drawing shall be indicated as "DELETED FROM CONTRACT" or "DELETED FROM SOLICITATION" in the description block of the title block. An X shall be placed across the drawing with bold letters "DELETED SHEET". For amendments the deleted drawing shall not be included in the printed drawing set although, the CADD file shall remain part of the CADD drawing files. For modifications the drawing shall remain as part of the drawing set. On the index sheet, the sequence, file name, sheet number and title shall remain and the words "DELETED SHEET" shall be placed in bold letters over the description. Surround the entire line in the index by a cloud and corresponding delta. The sheets deleted shall be identified in the index title block amendment or proposed modification description area.
14. To accompany the amendment the following shall be submitted:
  - Two Compact Disks with the following information on each:
    - a) cal files in a separate directory
    - b) CADD files in a separate directory
    - c) Specsintact files in a separate directory
    - d) pdf specification files in a separate directory
    - e) Amendment Text in Word format which is issued to bidders by category of Replacement Drawings, New Drawings, Replacement Specs, New Specs, etc.
    - f) Excel spreadsheet listing revised sheets with column headings for complete cal file name including ".cal" extension, sheet number, sequence number, sheet title, and CADD file name.
      - Half size prints on bond plotted from cal files